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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,186	09/21/2007	Rudolf Brenneisen	8588-US	3801
74476 Nestle HealthCa	7590 10/22/200 are Nutrition		EXAMINER	
	oad, 2nd Floor, Box 697		HA, JULIE	
Florham Park, NJ 07932			ART UNIT	PAPER NUMBER
			1654	
			NOTIFICATION DATE	DELIVERY MODE
			10/22/2009	ELECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

athena.pretory@us.nestle.com patentdepartment@rd.nestle.com

	Application No.	Applicant(s)				
Office Action Commence	10/580,186	BRENNEISEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	JULIE HA	1654				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on 11 A	uaust 2009					
· <u> </u>	· · · · · · · · · · · · · · · · · · ·					
<i>i</i> =	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
·—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims	,					
· <u> </u>						
	Claim(s) <u>1-47</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.	-14:					
8)⊠ Claim(s) <u>1-47</u> are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite				

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**DETAILED ACTION** 

Response to Election/Restriction filed on August 11, 2009 is acknowledged. Applicant

elected Group 3 with traverse. Upon further review, the election of species is revised to

clarify the species election that is required. Please note: the restriction that was mailed

on July 28, 2009 is maintained. Only the Election of Species is revised and follows

below.

Group 1, claims 1, 8-9, 33, 36-37 and 41, drawn to a method of preparation of a

medicament or nutritional formulation.

Group 2, claims 2-7 and 42-44, drawn to a method of treating, testing for or preventing a

disease or condition.

Group 3, claims 10-32, 34-35, 38-40 and 45-47, drawn to a nutritional or pharmaceutical

composition.

Election of Species

1. This application contains claims directed to more than one species of the generic

invention. These species are deemed to lack unity of invention because they are not so

linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Different  $\gamma$ -glutamyl-peptide:  $\gamma$ -glutamyl-alkyl-cysteine sulfoxide (subgenus) or  $\gamma$  -glutamyl-alkenyl-cysteine sulfoxide (subgenus); the species of  $\gamma$ -glutamyl-alkyl-cysteine sulfoxide is  $\gamma$ -L-glutamyl-trans-S-1-propenyl-L-cysteine sulfoxide (from claim 12);

Different disease or condition: Paget's disease, tumor-induced bone disease or osteoporosis;

Different calcium source: for example, from paragraph [0101] from instant specification US 20080194492 A1: calcium chloride, calcium phosphate, calcium sulfate, calcium oxide, calcium hydroxide, calcium carbonate, whole or skim milk powder, calcium caseinate;

Different energy source: carbohydrate (subgenus), or fat (subgenus), or nitrogen sources (subgenus): please elect a single disclosed species from a single subgenus from claims 15-17. If fat is elected, then please elect a single disclosed species of fat, for example, safflower oil for omega-6 polyunsaturated fatty acid (from paragraph [0105] for example);

Different nutritionally acceptable components: vitamins (subgenus), or minerals (subgenus), or trace elements (subgenus), or fibers (subgenus), or flavors (subgenus), or preservatives (subgenus), or colorants (subgenus), or sweeteners (subgenus), or emulsifiers (subgenus): please elect a single disclosed species from a single subgenus from paragraphs [0121]-[0124]. For example, if vitamin is elected, then please elect a single disclosed species of vitamin, Vitamin A (from paragraph [0121]);

Different Allium: from claim 30.

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2. Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

- 3. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).
- 4. The claims are deemed to correspond to the species listed above in the following manner:

Claims 8-9, 12, 14-17, 20, 26, 30-32, 35, 43-44.

The following claim(s) are generic: Claims 1-7, 10-11, 13, 18-19, 21-25, 27-29, 33-34, 36-42 and 45-47.

5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Different γ-glutamylpeptide are patentably independent and distinct due to their different structures. For example, alkyl (single bond) and alkenyl (double bond) are two different structures. Further, search for one would not necessarily lead to the other. Different disease or conditions are patentably independent and distinct. For example, Paget's disease is a chronic bone condition characterized by disorder of the normal bone remodeling process, thus the bone that is formed is abnormal, enlarged, not as dense, brittle and prone to breakage (see http://www.medicinenet.com/pagets\_disease/article.htm, enclosed in previous office action). Osteoporosis is a condition characterized by the loss of the normal density of bone, resulting in fragile bone (see http://www.medicinenet.com/osteoporosis/article.htm, enclosed in previous office action). A person suffering from one would not necessarily suffer from the other. Further, search for one would not necessarily lead to the other. Different calcium source is patentably independent and distinct due to different structures. For example, an

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inorganic calcium salt, calcium chloride has different structure than calcium citrate (organic acid). Further, search for one would not necessarily lead to the other. Different nutritionally acceptable components are patentably independent and distinct due to their different structures. For example, vitamin E (also known as tocopherol) has the

structure

Further, search for subgenus vitamin would not necessarily lead to subgenus fiber. Different energy sources are patentably independent and distinct due to their different structures. For example, carbohydrates have sugar molecule; fat are comprised of fatty acids; nitrogen sources comprise nitrogens.

Furthermore, different carbohydrate source of components are patentably independent and distinct due to their different structures. For example, lactose has the structure

and maltodextrin has the structure 2 content. Further, search for one would not necessarily lead to the other. Different fat source is patentably independent and distinct due to their different structures. For example, omega-6 fatty acids have double bond existing at the sixth carbon-carbon bond from the terminal methyl end of the carbon chain, and omega-3 fatty acids have double bond existing at the third carbon-carbon bond from the terminal methyl end of the carbon chain. Further, search for one would not necessarily lead to the other. Different nitrogen source of components are patentably independent and distinct due to their different amino acid content, leading to different structures. For example, protein hydrolysate is a mixture of amino acids prepared by splitting a protein with acid, alkali, or enzyme, and used as a fluid and nutrient replenisher (see <a href="http://medical-">http://medical-</a>

<u>dictionary.thefreedictionary.com/protein+hydrolysate</u>, enclosed in previous office action). Essential amino acids are Ile, Val, Leu, Phe, Trp, Thr, Met, Arg, Lys and His (see <a href="http://hyperphysics.phy-astr.gsu.edu/HBASE/organic/essam.html">http://hyperphysics.phy-astr.gsu.edu/HBASE/organic/essam.html</a>, enclosed in previous office action). Therefore, a mixture of essential amino acids and arginine could be any essential amino acids mixture and arginine. Therefore, a search for a protein hydrolysate would not necessarily lead to essential amino acid and arginine mixture. Different Alliums are patentably independent and distinct due to different sources. For

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example, Allium cepa is from shallots or onions. Allium sativum is from garlic. Further, search for one would not necessarily lead to the other.

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- 6. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.
- 7. For any group elected, Applicant is required to elect a single disclosed species of  $\gamma$ -glutamyl-peptide, for example,  $\gamma$ -glutamyl-trans-S-propenyl-L-cysteine sulfoxide. If Group 2 is elected, Applicant is further required to elect a single disclosed species of a disease, for example, Paget's disease. If Group 3 is elected, if other components are involved, Applicant is further required to elect a single disclosed species of a calcium source, a single disclosed species of energy source, and a single disclosed species of nutritionally acceptable component. Applicant is further required to elect a single disclosed species of the elements. For example, Applicant elect Group 3, and elects  $\gamma$ -glutamyl-trans-S-propenyl-L-cysteine sulfoxide as the  $\gamma$ -glutamyl peptide, skim milk for the calcium source, carbohydrate as the energy source, and fructose as the species of carbohydrate, and vitamin as the other nutritionally acceptable component, and vitamin A as the species of vitamins. Please note, if election is not made, then this will not lead to examination of claims 13-20. Additionally, for Group 3, Applicant is further required to elect a single disclosed species of Allium, for example, Allium cepa.
- 8. The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does

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not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

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- 9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 10. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

## Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JULIE HA whose telephone number is (571)272-5982. The examiner can normally be reached on Mon-Thurs, 5:30 AM to 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Julie Ha/ Examiner, Art Unit 1654